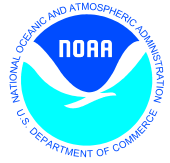


# **Proposed NWS Requirements-based Management Process for**

## ***Operations and Services Improvements***

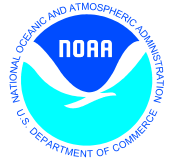
**Paul Hirschberg**  
**Office of Science and Technology**



# Outline

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- ✓ Motivation
- ✓ Background
- ✓ Proposed NOAA Process
- ✓ Proposed NWS Application
- ✓ Directives
- ✓ Next Steps

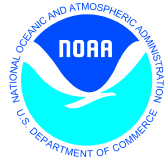


# Motivation

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## ✓ NOAA Program Review Recommendation (PRT) #24

“... a NOAA-wide (end-to-end) requirements-based management process (should) be established (to address) imbalance between requirements, budgeting, and priorities”.



# Background

## ✓ Problem:

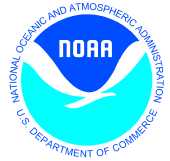
- *Define a standard, systematic, and disciplined process for developing requirements and implementing solutions*
- *Enable efficient transfer of applicable research results to improved products, services, and operations*
- *Apply NOAA's proposed RMP process in NWS*

## ✓ Desired Outcome:

- *NOAA (NWS) products, services, and operations are improved in cost-effective ways and in response to valid requirements*
- *Improved cross-functional communication and collaboration*
- *Stronger linkage between research and products, services, and operations*

# Background

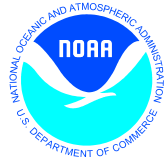
- ✓ Approach Taken By Working Groups -- Process should:
- *Be conceptually sound*
  - *Be scalable and adaptable - Can be applied appropriately throughout NOAA*
  - *Define minimum set of standard information necessary for decision-making and “end-to-end” planning and execution*
  - *Use existing business best practices*
  - *Augment, not supersede, existing process for planning, programming, or budgeting decisions required by law, regulation, or policy, (i.e., PPBS, OMB Circular A-11)*



# Proposed NOAA Process

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- ✓ Stage-gate process with checkpoint “gates” in between each stage
- ✓ Defines “**what**” is necessary to move from requirements to implementation, not “**how**” to do it
- ✓ Decision makers at checkpoints enforce standards and discipline, but also allow flexibility in execution



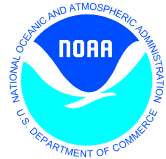
# Proposed NOAA Process

## ✓ Five stages

- *Stage 1: Collection of mandates, needs, and opportunities*
- *Stage 2: Validation and approval of requirements*
- *Stage 3: Research and analysis of potential solutions*
- *Stage 4: Development of selected solutions*
- *Stage 5: Implementation, maintenance, and assessment of solutions/results*

## ✓ Output from each stage is a set of “core” information documenting:

- *Key findings and recommendations realized from work within stage*
- *Initial plans and resource requirements for subsequent stages*
- *Documentation will provide content and detail appropriate for scope of activity*



# Proposed NOAA Process

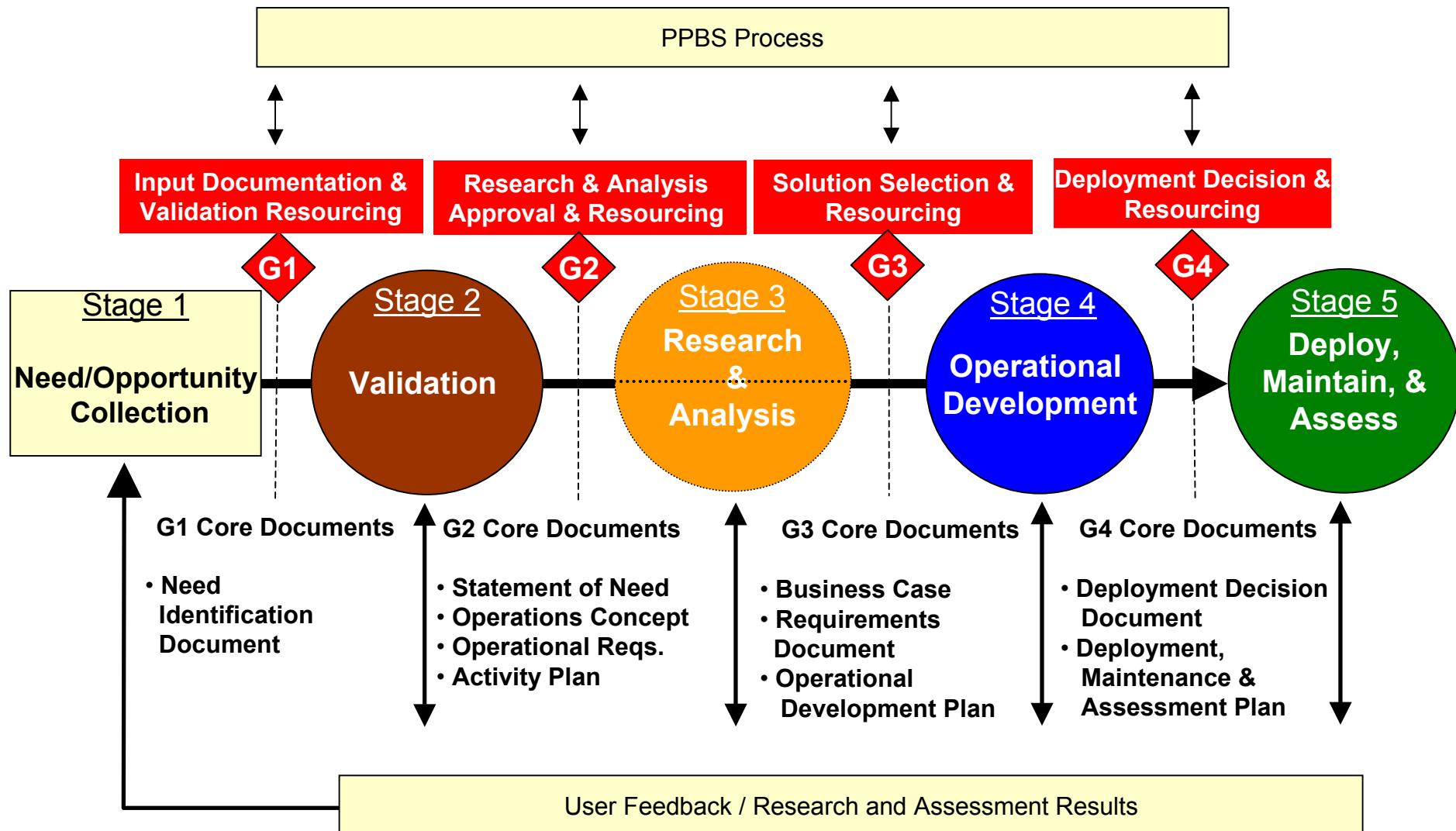
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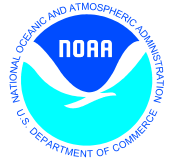
- ✓ Between each stage is a checkpoint “gate” where decision-makers assess results and commit resources for follow-on work
- ✓ Decision makers (aka gatekeepers)
  - *Managers accountable for prioritizing and resourcing activities*
  - *Ensure adequate information, coordination, and plans regarding requirements and solutions have been collected or developed in previous stage before approving work in following stage*
  - *Elevate decisions appropriately*



# Proposed NWS Application of RMP

## *for Operations and Services Improvement*





# Proposed NWS Application

## *Gate 1*

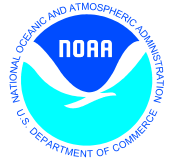
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### ✓ Core Documents:

- *Need/Opportunity Identification Document (NID)*

### ✓ Gate 1 Gatekeeper Responsibilities:

- *Approve NID*
- *Identify affected NWS units*
- *Assign Office of Primary Responsibility (OPR) for Validation Stage*
- *Schedule and resource Validation Stage*



# Proposed NWS Application

## *Gate 2*

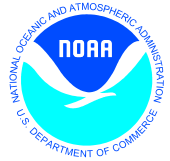
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### ✓ Core Documents:

- *Statement of Need (SON)*
- *Concept of Operations*
- *Operational Requirements Document*
- *Research & Analysis Plan*

### ✓ Gate 2 Gatekeeper Responsibilities:

- *Validate SON*
- *Approve Con Ops, Oper. Req. Doc, and Research & Analysis Plan*
- *Assign OPR(s) for Research and Analysis Stage*
- *Schedule and resource Research and Analysis Stage*



# Proposed NWS Application

## *Gate 3*

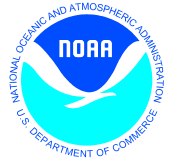
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### ✓ Core Documents:

- *Business Case*
- *Requirements Document*
- *Operational Development Plan*

### ✓ Gate 3 Gatekeeper Responsibilities:

- *Select Solution*
- *Validate Requirements Documents*
- *Approve Operational Development Plan*
- *Assign OPR(s) for Operational Development Stage*
- *Schedule and resource Operational Development Stage*



# Proposed NWS Application

## *Gate 4*

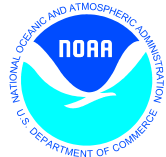
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### ✓ Core Documents:

- *Deployment Decision Document*
- *Deployment, Maintenance, and Assessment Plan*

### ✓ Gate 4 Gatekeeper responsibilities:

- *Approve operational readiness*
- *Approve Deployment, Maintenance, and Assessment Plan*
- *Assign OPR(s) for Deployment, Maintenance, and Assessment Stage*
- *Schedule and resource Deployment, Maintenance, and Assessment Stage*

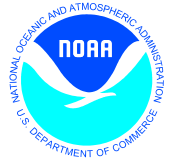


# Proposed NWS Application

## *Gatekeepers*

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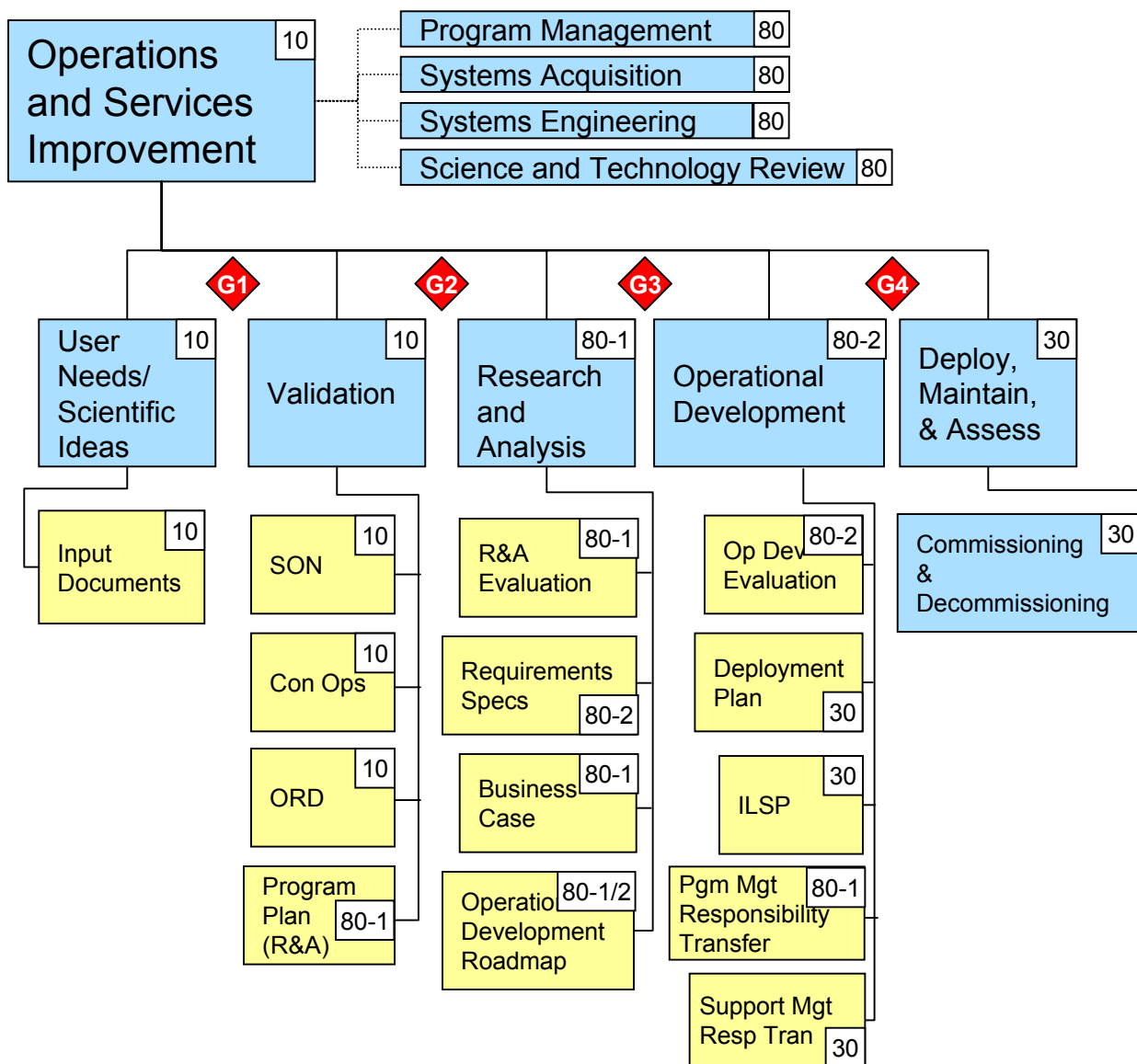
- ✓ Gatekeepers are standing “Gate” committees at each gate
- ✓ Gate Committee Representatives:
  - *One each from OCIO, OCWWS, OHD, OPS, OST, NCEP, and one Region (rotating basis).*
  - *Should be a decision-maker who has authority to review resource requirements and make decisions about resource allocations*
- ✓ Gate committees:
  - *Will define their own rules of order, staff, and operating procedures*
- ✓ CB OPS Committee will oversee Gate Committees and RMP in consultation with other committees as appropriate.



# Proposed Scope of NWS RMP

- ✓ RMP should be followed for any candidate change to NWS national baseline of operations and services.
- ✓ RMP is recommended to be appropriately applied at all levels of NWS.
  - *All NWS managers have responsibility for determining the scope and implementation of the RMP at their level.*
    - Managers should seek to push RMP decision making to the lowest appropriate level and
    - Ensure requirements information is applied and communicated in a disciplined manner, especially with respect to realizing beneficial interdependencies among affected units.

# NWS RMP Directive Structure



Directives

Instructions

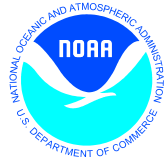
10 – OCWWS

30 – OOS

80-1 – OST/PPD

80-2 – OST/SEC





# Next Steps

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- ✓ Complete Directives/Instructions review
- ✓ Pilot with All Hazards
- ✓ Complete staffing and database requirements analysis
- ✓ Brief Directors
  - *Successful implementation and execution of an RMP requires corporate discipline, empowerment, and enforcement*
- ✓ Stand up Gate Committees